

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID P. LAUDE

Appeal No. 1999-1553
Application No. 08/567,379

ON BRIEF

Before KRASS, LALL, and GROSS, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-6, 8-14 and 16-22, all of the pending claims.

The invention is directed to the noise problem to which certain electrical circuits are susceptible. Rather than reducing the noise, as in conventional circuits, the present invention seeks to give the circuits noise immunity by coupling noise

generating components to a distributed electrical plane and inducing noise onto the distributed electrical plane. Coupling means, such as capacitors, for coupling the noise susceptible circuits to the distributed electrical plane more evenly, distributes noise to the noise susceptible circuits so that the noise is common and indistinguishable throughout the noise susceptible circuits and the noise susceptible circuits operate with immunity to the noise.

Representative independent claim 1 is reproduced as follows:

1. A noise-immune circuit comprising:

a distributed electrical conductor;

noise generating components coupled to said distributed electrical conductor inducing noise onto said distributed electrical conductor;

noise susceptible components coupled to said distributed electrical conductor; and

coupling means for coupling noise susceptible circuits to said distributed electrical conductor, said coupling means distributing noise to said noise susceptible circuits so that said noise is common throughout said noise susceptible circuits and said noise susceptible circuits operates [sic, operate] with immunity to said noise.

The examiner relies on the following references:

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| Nakayama | JP 2-284,515 | Nov. 21, 1990 |
| Uramoto et al. (Uramoto) | JP 3-183,211 | Aug. 09, 1991 |

Grob, Basic Electronics, Fifth Edition, page 560, published by McGraw Hill, Inc., NY (1984).

Additionally, the examiner relies on appellant's admitted prior art [APA] depicted in Figures 1 and 2 of the instant application.

Claims 1-6, 8-14 and 16-22 stand rejected under 35 U.S.C. § 103 as unpatentable over APA in view of Uramoto, Nakayama and Grob.

The positions of appellant and the examiner are laid out in the briefs and answer, respectively.

OPINION

The examiner's position is that APA discloses the claimed subject matter but for the claimed coupling means. This is not surprising since appellant's improvement over the prior art is the addition of the coupling means to make the noise common throughout the noise susceptible circuits in order to have these circuits operate with immunity to the noise.

Since the difference between APA Figure 2 and appellant's invention depicted in Figure 4 of the instant application is in the coupling means, specifically the gate, drain and supply capacitors shown in Figure 4, the examiner turns to prior art showing each of these various capacitors. That is, Nakayama discloses a gate capacitor C2 and the examiner says it would have been obvious to add a gate capacitor to APA Figure 2 "for

the purpose of preventing an input malfunction which may otherwise be caused by a ground potential fluctuation.” Uramoto discloses a drain capacitor 11b and the examiner says that it would have been obvious to add a drain capacitor to APA Figure 2 “for the purpose of suppressing switching noise.” The examiner also contends that it “is notoriously well known” that supplies often require low pass filtering and so Grob’s Figure 28-9, showing several well known low pass filters, including a supply capacitor C and impedances L1 and L2, would have led artisans to “add the filter for the purpose of filtering the supply noise.” See page 4 of the answer.

The examiner’s rejection is, in our view, based on impermissible hindsight gleaned from appellant’s own disclosure. The examiner is merely picking and choosing various capacitor connections from various pieces of prior art in order to reconstruct appellant’s Figure 4 embodiment. However, the instant claims call for the coupling means to couple noise susceptible circuits to a distributed electrical conductor so that the coupling means distributes noise to the noise susceptible circuits so that noise is common throughout the noise susceptible circuits, allowing those circuits to operate with immunity to the noise. The examiner has pointed to nothing in the applied references which shows the cited capacitors connected between a noise susceptible circuit and a distributed electrical conductor carrying noise signals, as claimed.

Because of appellant's connection of the coupling means (capacitors) to the distributed electrical conductor, noise is actually introduced into the noise susceptible circuits in order that the noise is "common throughout the noise susceptible circuits" so that the circuits operate with immunity to the noise. The examiner has pointed to nothing in the applied references remotely suggesting this claimed limitation.

The examiner's response is to state that the artisan would have been led by the teachings of the applied references "to add coupling means (i.e. capacitors) to virtually any point in any circuit" [answer-page 5]. That is a very general statement of obviousness and doesn't begin to answer the question as to why or how the applied references suggest the explicitly claimed connection of the coupling means to a distributed electrical conductor carrying noise signals in such a manner that noise is actually introduced into the noise susceptible circuits in order that the noise is "common throughout the noise susceptible circuits," allowing the circuits to operate with immunity to the noise.

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The examiner's decision rejecting claims 1-6, 8-14 and 16-22 under 35 U.S.C.
§ 103 is reversed.

REVERSED

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| ERROL A. KRASS |) | |
| Administrative Patent Judge |) | |
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| |) | BOARD OF PATENT |
| PARSHOTAM S. LALL |) | APPEALS |
| Administrative Patent Judge |) | AND |
| |) | INTERFERENCES |
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| |) | |
| ANITA PELLMAN GROSS |) | |
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